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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|----------------------------------|------------------|----------------------|-------------------------|-----------------|
| 09/900,141 | 07/09/2001 | Naoaki Kataoka | 2001-0978 | 6498 |
| 513 7 | 2590 11/30/2001 | | | _ |
| WENDEROTH, LIND & PONACK, L.L.P. | | | EXAMINER | |
| 2033 K STREET N. W. SUITE 800 | | | BEISNER, WILLIAM H | |
| WASHINGTO | N, DC 20006-1021 | | ART UNIT | PAPER NUMBER |
| | | | 1744 | |
| | | | DATE MAILED: 11/30/2001 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

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| | | · • | Application No. | Applicant(s) | |
| Offic | | <u>-</u> | 09/900,141 | KATAOKA ET AL. | |
| | | Action Summary | Examiner | Art Unit | |
| | | | William H. Beisner | 1744 | |
| TI | h MAIL | ING DATE of this communication app | | | |
| Period for R | eply | | | | |
| THE MAI - Extensions after SIX (- If the peric - If NO peric - Failure to - Any reply I | LING D s of time m 6) MONTH od for reply od for reply reply within received b | STATUTORY PERIOD FOR REPLY ATE OF THIS COMMUNICATION. nay be available under the provisions of 37 CFR 1.13 IS from the mailing date of this communication. It is specified above is less than thirty (30) days, a reply y is specified above, the maximum statutory period with the set or extended period for reply will, by statute, y the Office later than three months after the mailing idjustment. See 37 CFR 1.704(b). | 66(a). In no event, however, may within the statutory minimum of t ill apply and will expire SIX (6) M cause the application to become | a reply be timely filed nirty (30) days will be considered timely. DNTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133). | 1 |
| 1) 🗌 R | esponsi | ive to communication(s) filed on | <u>_</u> . | · | |
| 2a) <u></u> ⊤r | nis actio | on is FINAL . 2b)⊠ Thi | s action is non-final. | | |
| | | s application is in condition for allowa accordance with the practice under <i>i</i> | | natters, prosecution as to the merits is C.D. 11, 453 O.G. 213. | |
| Disposition | of Clai | ms | | | |
| 4)⊠ Cla | aim(s) | 1-20 and 28-35 is/are pending in the | application. | | |
| 4a) | Of the | above claim(s) is/are withdrav | vn from consideration. | | |
| 5) <u></u> Cla | aim(s) _ | is/are allowed. | | | |
| 6)⊠ Cla | aim(s) <u>1</u> | <u>-20 and 28-35</u> is/are rejected. | | | |
| 7) | aim(s) _ | is/are objected to. | | • | |
| 8)∏ Cla | aim(s) _ | are subject to restriction and/or | r election requirement. | | |
| Application | Papers | 3 | | | |
| 9) <u></u> The | specifi | cation is objected to by the Examine | r. | | |
| 10) <u></u> The | drawin | g(s) filed on is/are: a)□ accep | ted or b) objected to by | the Examiner. | |
| | | may not request that any objection to the | | | |
| , | | sed drawing correction filed on | | disapproved by the Examiner. | |
| | | ed, corrected drawings are required in rep | _ | | |
| , — | | r declaration is objected to by the Ex | aminer. | | |
| _ | | l.S.C. §§ 119 and 120 | | | |
| • | | dgment is made of a claim for foreign | priority under 35 U.S.C | c. § 119(a)-(d) or (f). | |
| _ | |] Some * c) ☐ None of: | | | |
| _ | | tified copies of the priority documents | | | |
| | | tified copies of the priority documents | • | | |
| | | pies of the certified copies of the prior application from the International Bur ached detailed Office action for a list | reau (PCT Rule 17.2(a) |). | |
| | · | | · | C. § 119(e) (to a provisional application). | |
| | | anslation of the foreign language pro gment is made of a claim for domesti | • • | | |
| Attachment(s) | | | - | | |
| 2) Notice of | Draftspe | ces Cited (PTO-892) rson's Patent Drawing Review (PTO-948) sure Statement(s) (PTO-1449) Paper No(s) <u>4</u> | 5) Notice | w Summary (PTO-413) Paper No(s) of Informal Patent Application (PTO-152) | |

U.S. Patent and Trademark Offic PTO-326 (Rev. 04-01)

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority under 35
U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/355,891, filed on 22 Oct. 1999.

Information Disclosure Statement

2. The information disclosure statement filed 22 Aug. 2001 has been considered and made of record.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 5 and 15-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 5 and 17, is there any difference between a "manganese-magnesium" alloy and a "magnesium-manganese" alloy?

In claims 15-17, is the recited limitation to this claim in terms of the contaminated matter prior to the addition of the reducing agent or after addition of reducing agent?

Claim Rejections - 35 USC § 102

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5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
- 6. Claims 1, 2, 8, 12, 13, 28, 30 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Seech et al. (US 5,480,579).

The reference of Seech et al. discloses a method of purifying contaminated matter using a composition which includes iron particles and fibrous organic matter. The reference also discloses the use of nutrients as part of the composition (See column 3, .lines 1-60).

7. Claims 1-4, 6, 7, 10, 11, 13, 18, 19, 28, 29, 31 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by Haitko et al.(US 5,362,402).

The reference of Haitko et al. discloses a composition of metallic iron and citric acid to treat contaminated matter containing halogenated compounds. The citric acid is capable of acting as a nutrient in the presence of indigenous microorganisms.

8. Claims 1, 2, 6, 7, 9-11, 13, 18, 19, 28 and 34 are rejected under 35 U.S.C. 102(b) as being anticipated by DeWeerd et al. (US 5,484,729).

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The reference of DeWeerd et al. discloses a process for treating contaminated material which includes a reducing agent (benzoic acid) and nutrients (See column 5, lines 13-25). The reaction occurs at a pH from 6 to 7.

Claim Rejections - 35 USC § 103

- 9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 10. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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1-200 rd 28-35

12. Claims 1-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuring et al. (US 5,908,267).

The reference of Schuring et al. discloses a method for the treatment of contaminated matter which includes contacting the contaminated matter with a treatment agent.

While the reference discloses a number of treating agents which can be contacted the reference does not specifically recited the instantly claimed combination of compounds and treatment steps.

Specifically the reference of Schuring et al. discloses that based on the source of contamination, the dry treatment media can include powered metals and alloys, organic compounds and compositions which promote growth of microorganisms.

In view of these teachings, it would have been obvious to one of ordinary skill in the art to determine the optimum reagents of those disclosed to treat the contaminated matter based on considerations such as the presence of indigenous microorganisms, the specifics of the contaminants, etc.

With respect to claims 28-35, while the reagent of Schuring et al. is provided in a dry format, it would have been obvious to one of ordinary skill in the art to provide a liquid media when it is not required to treat the contaminated matter in the specific contacting manner disclosed by the reference of Schuring et al..

With respect to the specific mixing, adding and amounts of reagent specifying in claims 29-35, it would have been obvious to one of ordinary skill in the art to determine the optimum manner in which to contact the treatment composition with the contaminated matter based

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merely on the source of the specific treatment agents and the environment in which the contaminated matter is to be treated.

13. Claims 32, 33 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeWeerd et al. (US 5,484,729).

The reference of DeWeerd et al. has been discussed above.

While not specifically disclosed by DeWeerd et al., the specific mixing, adding and amounts of reagent specifying in claims 32, 33 and 35, it would have been obvious to one of ordinary skill in the art to determine the optimum manner in which to contact the treatment composition with the contaminated matter based merely on the source of the specific treatment agents and the environment in which the contaminated matter is to be treated.

14. Claims 29 and 32-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Seech et al.(5,480,579)..

The reference of Seech et al. has been discussed above.

While not specifically disclosed by Seech et al., the specific mixing, adding and amounts of reagent specifying in claims 29 and 32-35, it would have been obvious to one of ordinary skill in the art to determine the optimum manner in which to contact the treatment composition with the contaminated matter based merely on the source of the specific treatment agents and the environment in which the contaminated matter is to be treated.

Conclusion

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The prior art made of record and not relied upon is considered pertinent to applicant's 15.

disclosure. The reference of Jackson, Jr. et al. (US 6,280,625) is cited as prior art which pertains

to remediation of contaminated matter which chemical destruction and/or biological destruction

(See column 5, lines 18-55).

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to William H. Beisner whose telephone number is 703-308-4006.

The examiner can normally be reached on Tues. to Fri. and alt. Mon. from 6:40am to 4:10pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Robert Warden can be reached on 703-308-2920. The fax phone numbers for the

organization where this application or proceeding is assigned are 703-872-9310 for regular

communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is 703-308-0661.

liam H. Beisner

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Primary Examiner

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WHB

November 19, 2001